```
1
                                            PAGES 1 - 44
 2
                  UNITED STATES DISTRICT COURT
 3
                NORTHERN DISTRICT OF CALIFORNIA
 4
           BEFORE THE HONORABLE SUSAN ILLSTON, JUDGE
 5
     ARIOSA DIAGNOSTICS, INC.,
 6
                 PLAINTIFF,
 7
       VS.
                                        ) NO. C 11-06391 SI
 8
      SEQUENOM, INC.,
 9
                                        ) SAN FRANCISCO,
                                        ) CALIFORNIA
10
                 DEFENDANTS.
                                        ) FRIDAY
                                        ) OCTOBER 11, 2013
11
                                       ) 9:30 O'CLOCK A.M.
     ARIOSA DIAGNOSTICS, INC.,
12
            COUNTERCLAIM-DEFENDANT,
13
       VS.
14
      ISIS INNOVATION LIMITED,
15
16
                  NOMINAL COUNTERCLAIM )
17
                 DEFENDANT,
18
19
                   TRANSCRIPT OF PROCEEDINGS
20
21
      TRANSCRIBED BY: KATHERINE WYATT, CERTIFIED REPORTER
                      CSR # 9866 RPR, RMR
22
23
                      925-212-5224
24
25
```

	· · · · · · · · · · · · · · · · · · ·
1	FOR PLAINTIFF: IRELL & MANELLA LLP
2	1800 AVENUE OF THE STARS, SUITE 900
3	LOS ANGELES, CALIFORNIA 90067-4276
4	BY: DAVID I. GINDLER, ESQUIRE ANDREI IANCU, ESQUIRE
5	
6	FOR DEFENDANT: KAYE SCHOLER, LLP TWO PALO ALTO SQUARE, SUITE 400
7	3000 EL CAMINO REAL PALO ALTO, CALIFORNIA 94306
8	BY: MICHAEL J. MALECEK, ESQUIRE ATON ARBISSER, ESQUIRE
9	LILY R. ROBINTON, ATTORNEY AT LAW
10	FOR NOMINAL COUNTERCLAIM DEFENDANT:
11	SATTERLEE STEPHENS BURKE BURKE
12	230 PARK AVENUE
13	NEW YORK, NEW YORK 10169
14	BY: MARIO AIETA, ESQUIRE (BY PHONE)
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

Case 3:11-cv-06391-SI Document 253 Filed 10/30/13 Page 3 of 44 1 2 OCTOBER 11, 2013 9:30 O'CLOCK A.M. 3 4 PROCEEDINGS 5 THE CLERK: CALLING CIVIL 11-6391, ARIOSA VERSUS 6 SEQUENOM. 7 MR. GINDLER: GOOD MORNING, YOUR HONOR. DAVID GINDLER OF 8 IRELL & MANELLA FOR THE PLAINTIFF ARIOSA DIAGNOSTICS. AND WITH 9 ME IS MY PARTNER, ANDREI IANCU. MR. MALECEK: GOOD MORNING, YOUR HONOR. MIKE MALECEK FROM 10 11 KAYE SCHOLER ON BEHALF OF SEQUENOM . 12 WITH ME IS ATON ARBISSER AND OUR COLLEAGUE IS LILY 13 ROBINTON. 14 BUT WE NEED TO GET SOMEBODY ON THE PHONE. 15 THE COURT: WHILE WE'RE DOING THAT, SEQUENOM, I RECEIVED 16 THIS IN THE MAIL. IT IS NOT READ BY MY JUDICIAL EYES, SO I 17 DON'T REALLY KNOW WHAT IS IN IT. BUT IT LOOKS TO ME LIKE IT HAS 18 NOTHING TO DO WITH MY JOB IN THIS CASE, BUT IT RELATES TO 19 SEOUENOM. 20 SO I'M JUST GOING TO GIVE IT TO YOU, AND YOU SHOULD 21 PROBABLY SHOW IT TO ARIOSA AND SEE IF THEY THINK IT RELATES TO 22 THE CASE. IT WAS NOT FILED. IT JUST CAME IN THE MAIL. SO IF 23 ANYBODY WANTS TO FILE ANY PART OF IT, GO FOR IT. BUT I DON'T

THINK THAT IT'S IN THE CASE.

24

25

MR. MALECEK: YOU DIDN'T RECEIVE THIS FROM US, I DON'T

```
1
      THINK.
 2
           THE COURT: OH, NO. NO. THERE'S AN ADDRESS ON THERE.
      I DON'T REMEMBER WHO SENT IT. IT WAS NOBODY RELATED TO THE
 3
 4
      CASE.
 5
           (THEREUPON, A PHONE CALL IS PLACED BY CLERK.)
 6
          MR. AIETA (BY PHONE): GOOD AFTERNOON.
 7
           THE CLERK: IS THIS MARIO AIETA?
 8
          MR. AIETA (BY PHONE): IT IS.
 9
          THE CLERK: IT'S TRACY WITH JUDGE ILLSTON'S CHAMBERS.
          MR. AIETA (BY PHONE): GOOD MORNING.
10
11
          THE CLERK: COULD YOU JUST STATE YOUR APPEARANCE FOR THE
12
      RECORD? WE'VE ALREADY CALLED THE CASE.
13
          MR. AIETA (BY PHONE): SURE. THIS IS MARIO AIETA OF
14
      SATTERLEE STEPHENS BURKE BURKE FOR ISIS INNOVATION.
15
          THE CLERK: THANK YOU.
16
          THE COURT: GOOD MORNING, SIR.
17
          MR. GINDLER: GOOD MORNING.
18
          THE COURT: AND HERE, IT LOOKS LIKE THERE'S A LITTLE BIT
19
     MORE OF THAT.
20
          THE CLERK: HERE, THERE'S --
21
          THE COURT: SO WE HAVE ON TODAY CROSS MOTIONS FOR SUMMARY
22
      JUDGMENT RELATED TO WHETHER OR NOT THE '540 PATENT IS DRAWN TO
23
      PATENT-ELIGIBLE SUBJECT MATTER UNDER 35 U.S.C. 101, WHICH WE
      HAVE LOOKED AT WITH SOME CARE. AND THIS APPEARS TO BE A HOT
24
25
     AREA IN THE LAW RIGHT NOW.
```

```
1
           AND I HAVE, FRANKLY, GONE BACK AND FORTH AND BACK AND
 2
      FORTH ON WHAT TO DO WITH THIS MOTION. MY CURRENT THINKING,
 3
      I'LL TELL YOU, FOR THE BOTTOM LINE IS TO FIND THAT IT IS
      PATENT-ELIGIBLE.
 4
 5
           SO THAT'S, I GUESS, DENYING ARIOSA'S MOTION AND GRANTING
 6
      SEQUENOM'S. BUT I THINK IT'S A VERY, VERY CLOSE QUESTION. AND
 7
      I WILL BE HAPPY TO HEAR FROM YOU ABOUT IT.
 8
           ONE -- WELL, I'LL BE HAPPY TO HEAR FROM YOU ABOUT IT. I
 9
      DON'T CARE WHO GOES FIRST.
10
          MR. GINDLER: GOOD MORNING, YOUR HONOR.
11
           THE ANSWER TO THE QUESTION, OF COURSE, DEPENDS UPON THE
12
      QUESTION THAT YOU ASK FOR PATENT-ELIGIBLE SUBJECT MATTER.
13
          AND I THINK THE SUPREME COURT HAS DONE A GOOD JOB OF
14
      LAYING OUT WHAT THE CENTRAL INQUIRY IS. THAT WAS DONE FOR
15
      METHOD CLAIMS, IN PARTICULAR, IN THE LIFE SCIENCES AREA IN THE
16
      MAYO VERSUS PROMETHEUS CASE, WHERE THE COURT NOTES THAT ITS
17
      PRIOR PRECEDENCE INSISTS THAT A PROCESS THAT FOCUSES UPON THE
18
      USE OF A NATURAL LAW ALSO CONTAIN OTHER ELEMENTS OR COMBINATION
19
      OF ELEMENTS, SOMETIMES REFERRED TO AS AN INVENTIVE CONCEPT,
20
      SUFFICIENT TO ENSURE THAT THE PATENT AMOUNTS TO SIGNIFICANTLY
21
      MORE THAN A PATENT UPON THE NATURAL LAW ITSELF.
22
          WHAT'S IMPORTANT ABOUT THAT IS THAT THE INVENTIVE CONCEPT
23
      RELATES TO THE OTHER ELEMENTS, NOT THE NATURAL LAW, BUT WHAT
24
      ELSE THE INVENTOR BROUGHT TO THE TABLE.
25
           THE COURT: RIGHT. AND SO --
```

1	MR. GINDLER: SO SAID A DIFFERENT WAY, AGAIN, LOOKING AT
2	THE MAYO VERSUS PROMETHEUS CASE, THE UNDERLYING FUNCTIONAL
3	CONCERN HERE IS A RELATIVE ONE.
4	HOW MUCH FUTURE INNOVATION IS FORECLOSED RELATIVE TO THE
5	CONTRIBUTION OF THE INVENTOR? WHAT'S IMPORTANT IS THAT THE
6	CONTRIBUTION OF THE INVENTOR IS NOT ASSESSED RELATIVE TO THE
7	NATURAL PHENOMENON OR THE NATURAL LAW.
8	AND THAT POINT WAS MADE CLEAR NOT JUST IN MAYO VERSUS
9	PROMETHEUS BY POINTING OUT YOU LOOK AT THE OTHER ELEMENTS.
10	THAT COMES FROM PRIOR SUPREME COURT PRECEDENCE, SUCH AS PARKER
11	VERSUS FLOOK.
12	AND PARKER VERSUS FLOOK SAYS THAT YOU PUT THE FORMULA
13	IN THAT CASE IT WAS A MATHEMATICAL FORMULA TO THE SIDE. AND
14	THE COURT SAID PUTTING THAT MATHEMATICAL FORMULA TO THE SIDE,
15	THERE WAS NO INVENTIVE CONCEPT IN THE CLAIMED APPLICATION OF
16	THE FORMULA.
17	AND THE COURT, AGAIN, IN PARKER VERSUS FLOOK SAID THE
18	CLAIM MUST BE, QUOTE:
19	"CONSIDERED AS IF THE PRINCIPLE OR MATHEMATICAL
20	FORMULA WERE WELL-KNOWN."
21	THE THING WHICH IS TOUTED BY SEQUENOM AND WHICH IS TOUTED
22	BY THE APPLICANTS IN THEIR PATENT APPLICATION, AND IN THE
23	PATENT ITSELF IS THE DISCOVERY OF A NATURAL PHENOMENON.
24	THE COURT: WELL, THEY SAY NOBODY EVER TESTED MATERNAL
25	SERUM BEFORE. THEY THREW IT AWAY. SO WHAT IS NEW IS WE TEST

THE MATERNAL SERUM AND COUNT THESE THINGS.

MR. GINDLER: THEY ABSOLUTELY CLAIM THAT THEY WERE THE FIRST PEOPLE TO HAVE LOOKED AT MATERNAL SERUM OR PLASMA AND DETECT CELL-FREE FETAL DNA.

THE QUESTION IS: WHAT DID THEY BRING TO THE TABLE? WHAT IS CLAIMED IN THE PATENT OTHER THAN THE DISCOVERY OF A NATURAL PHENOMENON? BECAUSE THAT'S HOW YOU ASSESS WHETHER OR NOT YOU HAVE PATENT-ELIGIBLE SUBJECT MATTER FOR A PATENT THAT FOCUSES ON THE USE OF A NATURAL PHENOMENON.

IF THE DISCOVERY OF A NATURAL PHENOMENON, A NEW ONE, WERE THE HALLMARK OF PATENTABILITY, THEN THEY WOULD ALL BE PATENTABLE. EVERY TIME SOMEONE IDENTIFIES A NEW NATURAL PHENOMENON, COMES UP WITH A NEW MATHEMATICAL PRINCIPLE, IT WOULD ALL BE PATENTABLE. BUT IT'S NOT.

AND IN MAYO VERSUS PROMETHEUS THE COURT GAVE FURTHER ELABORATION ON WHAT AN INVENTIVE CONCEPT MEANS; THE THING THAT YOU LOOK AT BESIDES THE NATURAL PHENOMENON.

AND WHAT THE COURT SAID THERE IS THAT IF THE OTHER STEPS

ARE WELL-UNDERSTOOD, ROUTINE AND CONVENTIONAL SCIENTIFIC

ACTIVITY AT THE TIME OF THE INVENTION, THEN SIMPLY COMBINING

THAT WITH A NATURAL PHENOMENON, EVEN IF IT'S NEW, DOES NOT GET

YOU PATENT-ELIGIBLE SUBJECT MATTER.

NOW, THAT IS PRECISELY -- IT IS PRECISELY WHAT WE HAVE
HERE. NO ONE IS DISPUTING THAT THE PRESENCE OF CELL-FREE FETAL
NUCLEIC ACIDS IN MATERNAL SERUM OR PLASMA IS A NATURAL

1 PHENOMENON. OF COURSE IT IS. 2 OKAY. WHAT ELSE DID THE APPLICANTS BRING TO THE TABLE? 3 DID THEY COME UP WITH A NEW AND NOVEL METHOD OF DETECTING IT? 4 OR DID THEY RELY UPON ROUTINE, WELL-UNDERSTOOD CONVENTIONAL 5 ACTIVITY TO DETECT IT? 6 IT IS UNDISPUTED IN THE RECORD. IT IS UNDISPUTED IN THE 7 RECORD THAT THEY RELIED UPON ROUTINE, WELL-UNDERSTOOD 8 CONVENTIONAL ACTIVITY. 9 HOW DO WE KNOW THAT? BECAUSE THE APPLICANTS SAID IT OVER AND OVER AGAIN IN THE PROSECUTION OF THE APPLICATION. 10 11 SEQUENOM'S EXPERT SAYS IT. 12 WHAT WAS THE STATE OF THE ART AT THE TIME? THE APPLICANTS 13 WERE NOT THE FIRST PEOPLE TO DETECT CELL-FREE DNA IN SERUM OR 14 PLASMA. THAT HAD ALREADY BEEN DONE. 15 TUMOR CELL-FREE DNA HAD BEEN DETECTED USING THE SAME STEPS 16 IN THAT SAME COMBINATION THAT THE APPLICANTS USED. 17 IN FACT, THE ARTICLE THAT DR. LO, ONE OF THE NAMED 18 INVENTORS, PUBLISHED ANNOUNCING IT BEGINS BY REFERENCING THE 19 WORK DONE WITH CELL-FREE TUMOR DNA AND SAID THAT WAS THE 20 IMPETUS FOR HIM TO GO AND LOOK TO SEE IF THERE WAS CELL-FREE 21 FETAL DNA. 22 SO WE HAVE A NATURAL PHENOMENON THAT IS DETECTED BY A 23 METHOD WHICH IS INDISPUTABLY CONVENTIONAL. IT HAD ALREADY BEEN 24 USED BY OTHERS TO DETECT CELL-FREE NUCLEIC ACIDS IN SERUM OR

25

PLASMA.

1	THE COURT: WHEN HE WROTE THE ARTICLE ABOUT IT, DID HE SAY
2	HOW HE FOUND IT? HE SAID:
3	"I WAS PROMPTED TO LOOK BECAUSE OF THE TUMORS, SO
4	THEN I LOOKED FOR THE MATERNAL FOR THE FETAL DNA."
5	DID HE SAY HOW HE DID IT OR WHAT HE DID?
6	MR. GINDLER: YES. ALL THESE PAPERS GO THROUGH THE
7	SCIENTIFIC PROCESS. AND IT'S ACTUALLY DESCRIBED IN THE PATENT.
8	THE COURT: AND IT'S THE SAME THING.
9	MR. GINDLER: IT'S THE SAME THING THAT'S IN THE PATENT.
10	THE PATENT DESCRIBES THE STEPS AS BEING ROUTINE. AND THE
11	APPLICANTS DESCRIBE THEM AS ROUTINE.
12	DR. LO IN DECLARATIONS AND IN THE PROSECUTION OF THE
13	APPLICATION REPEATEDLY SAID THAT A SKILLED PERSON IN THE ART
14	CAN IDENTIFY THESE FETAL NUCLEIC ACIDS USING ROUTINE,
15	WELL-KNOWN TECHNIQUES.
16	WE CITE THIS AND REPEAT IT IN OUR OPENING PAPERS AND IN
17	OUR OPPOSITION TO THEIR MOTION REPEATEDLY.
18	THESE ARE THE WORDS OF INVENTOR DESCRIBING HIS OWN
19	APPLICATION, HIS OWN CLAIMS. HE IS NOT SAYING:
20	"I CAME UP WITH A UNIQUE WAY OF IDENTIFYING CELL-FREE
21	NUCLEIC ACIDS IN SERUM OR PLASMA. HE IS SAYING:
22	"WHAT IS NEW ABOUT WHAT I DID IS I FOUND SOMETHING
23	THAT NO ONE ELSE KNEW EXISTED BEFORE."
24	THAT'S ALL THAT HE IS SAYING. THAT IS NOT ENOUGH FOR A
25	PATENT. BECAUSE WHAT THIS COMES DOWN TO IS: DOES IT MAKE A

1 DIFFERENCE THAT THE SOURCE OF THE CELL-FREE DNA IS FETAL AS 2 OPPOSED TO FROM A TUMOR? 3 BECAUSE THAT IS THE ONLY DIFFERENCE, THE NATURAL 4 PHENOMENON IS DIFFERENT. BUT BOTH TUMOR WORK AND THIS PATENT 5 ARE USING THE SAME CONVENTIONAL STEPS TO LOOK FOR A NATURAL 6 PHENOMENON IN SERUM OR PLASMA. 7 IT'S NOT PATENTABLE. SEQUENOM SAYS THAT IT'S ENOUGH THAT 8 THE CLAIMS COVER THE NOVEL USE OF A NATURAL PHENOMENON. BUT 9 THAT TEST COLLAPSES IN ON ITSELF, AND IT'S NEVER BEEN 10 ARTICULATED AS THE TEST, BECAUSE THE ONLY THING THAT IS NEW IS 11 THE NATURAL PHENOMENON. 12 IF THAT WAS THE TEST EVERY PATENT CLAIM THAT USES A NEWLY 13 DISCOVERED NATURAL PHENOMENON -- JUST ASSUMING THAT IT IS NEWLY 14 DISCOVERED IN THIS CASE -- WOULD BE PATENTABLE. 15 THAT'S NOT THE TEST. IT'S NOT HOW THE SUPREME COURT 16 ARTICULATED THE TEST FOR OVER 40 YEARS. IT'S NEVER BEEN DONE 17 THAT WAY. 18 AND WE HAVE QUITE A LOT MORE GUIDANCE THAN WE USED TO 19 HAVE. WE HAVE FUNK BROTHERS. WE HAVE PARKER VERSUS FLOOK. 20 HAVE MAYO VERSUS PROMETHEUS. WE HAVE MYRIAD, ALL OF WHICH ARE 21 CONSISTENT IN SAYING WHAT YOU NEED TO DO IS TO LOOK AT THE 22 INVENTOR'S CONTRIBUTION APART FROM THE NATURAL PHENOMENON, 23 BECAUSE THAT'S HOW YOU PREVENT, THAT IS HOW YOU PREVENT A 24 PATENT APPLICANT FROM CLAIMING TOO MUCH USE OF THE NATURAL

PHENOMENON TO FORECLOSE FUTURE INNOVATION.

25

1 AND THAT'S PRECISELY WHAT IS HAPPENING HERE. EVERY 2 PARTICIPANT IN THIS NEW MARKET IS BEING SUED FOR PATENT 3 INFRINGEMENT. EVERYBODY. 4 WHAT DOES THAT DO? IT BLOCKS ALL INNOVATION IN THIS 5 FIELD. THAT IS THE VICE THAT IS WARNED AGAINST BY THE SUPREME 6 COURT'S LEGACY OF CASES HERE THAT GO UP TO MOST RECENTLY THE 7 MYRIAD CASE. 8 SEQUENOM WAS VERY CLEAR THAT THEY SAID THAT THIS PREEMPTS 9 THE USE OF ANY FETAL DNA. THAT'S WHY WE ARE HERE. THEY TOLD 10 THE MARKETPLACE THAT BEFORE WE FILED OUR LAWSUIT. THAT WAS THE IMPETUS FOR OUR LAWSUIT. THEY WERE THREATENING EVERYBODY AND 11 12 MAKING VERY CLEAR: 13 "YOU USE THIS NATURAL PHENOMENON, THEN YOU HAVE A PROBLEM WITH OUR PATENT." 14 15 THAT IS PRECISELY THE HARM WHICH IS BEING -- THAT WOULD BE 16 ALLOWED IF THE COURT FOUND THIS TO BE PATENT-ELIGIBLE SUBJECT 17 MATTER. 18 ONE OF THE CENTRAL ARGUMENTS THAT IS MADE BY SEQUENOM IS 19 THAT THERE'S ESSENTIALLY A BRIGHT LINE TEST. THEY SAID IT'S 20 VERY SIMPLE. IF THERE'S COMPLETE PREEMPTION, THEN IT IS NOT 21 PATENT-ELIGIBLE. 22 IF IT IS NOT COMPLETE PREEMPTION, THEN IT IS 23 PATENT-ELIGIBLE. IT'S JUST THAT SIMPLE TO SEQUENOM. BUT IT'S 24 NOT JUST THAT SIMPLE UNDER THE CASE LAW FROM THE SUPREME COURT 25 OR EVEN THE FEDERAL CIRCUIT.

1 THE COURT: WELL, AND THE PREEMPTION ISSUE IS IMPORTANT, 2 BUT NOT DETERMINATIVE. MR. GINDLER: CORRECT. IT IS IMPORTANT IN THE FOLLOWING 3 4 SENSE. IF YOU HAVE A CLAIM WHICH DID LITERALLY PREEMPT ALL 5 USES OF A NATURAL PHENOMENON, IT ABSOLUTELY WOULD NOT BE 6 PATENT-ELIGIBLE BECAUSE IT WOULD NOT POSSIBLY MEET THE SUPREME 7 COURT'S ARTICULATION OF THE STANDARD THAT THE CLAIM MUST HAVE 8 OTHER ELEMENTS OR COMBINATION OF ELEMENTS THAT AMOUNT TO AN 9 INVENTIVE CONCEPT THAT'S DIFFERENT THAN THE NATURAL PHENOMENON ITSELF. 10 11 SO IF YOU HAVE COMPLETE PREEMPTION IT COULDN'T POSSIBLY 12 MEET THAT TEST. BUT THE KEY IS THAT THE CONVERSE IS NOT TRUE. 13 IT IS NOT TRUE THAT IF YOU HAVE SOME USE OF A NATURAL 14 PHENOMENON, WHICH IS NOT PREEMPTED, THAT THAT IS YOUR TICKET TO 15 PATENT ELIGIBILITY LAND. 16 THAT'S NOT HOW THE LAW WORKS. IN FACT, IN THE RECENT CLS 17 BANK CASE, WHICH DID NOT EVEN YIELD A MAJORITY DECISION FROM 18 THE FEDERAL CIRCUIT, BUT THE TWO LEADING --19 THE COURT: IS THAT THE ONE THAT HAD SEVEN DECISIONS? 20 MR. GINDLER: IT'S THE ONE THAT HAD, I THINK, AT LEAST 21 SIX. 22 BUT IN THAT CASE, THE TWO MAJOR DECISIONS, ONE BY JUDGE 23 LOURIE AND ONE BY JUDGE RADER, NEITHER OF THEM ADOPTS A 24 PREEMPTION TEST. 25 JUDGE LOURIE SAID THE PROPER FOCUS IS NOT, PREEMPTION, PER SEE. JUDGE RADER SAYS:

"EVEN IF A CLAIM DOES NOT WHOLLY PREEMPT AN ABSTRACT IDEA, IT STILL WILL NOT BE MEANINGFULLY LIMITED IF IT CONTAINS ONLY INSIGNIFICANT OR TOKEN PRE OR POST SOLUTION ACTIVITY."

THE COURT: JUDGE NEWMAN SAID:

"WITH TODAY'S JUDICIAL DEADLOCK, THE ONLY ASSURANCE
IS THAT ANY SUCCESSFUL INNOVATION IS LIKELY TO BE
CHALLENGED IN OPPORTUNISTIC LITIGATION WHOSE RESULT WILL
DEPEND ON THE RANDOM SELECTION OF THE PANEL."
THAT'S WHAT SHE SAID.

MR. GINDLER: AND THAT IS OBVIOUSLY AN ISSUE WITH THE LACK
OF GUIDANCE FROM THE FEDERAL CIRCUIT.

BUT HERE WE HAVE AN ADVANTAGE. AND THE ADVANTAGE IS WE HAVE AT LEAST FOUR RELEVANT UNITED STATES SUPREME COURT CASES WHICH PROVIDE VERY CLEAR GUIDANCE ON THE OUTCOME HERE.

THE FEDERAL CIRCUIT HAS REALLY WRESTLED WITH THE ISSUE,

PARTICULARLY IN THE AREA OF ABSTRACT IDEAS AND MATHEMATICAL

FORMULAS AND WHEN THEY CAN BE PATENTABLE OR IMPLEMENTED IN A

COMPUTER PLATFORM, FOR EXAMPLE. HOW MUCH DOES THAT REALLY ADD

TO THE ABSTRACT IDEA?

HERE WE'RE IN THE LIFE SCIENCES. AND WE ACTUALLY HAVE A NUMBER OF SUPREME COURT DECISIONS ACTUALLY ON THIS SUBJECT IN THE LIFE SCIENCES, STARTING WITH FUNK BROTHERS, WHICH DEALT WITH A DISCOVERY THAT A CERTAIN COMBINATION OF BACTERIA WERE

1 VERY HELPFUL TO A CERTAIN KIND OF PLANTS IN HELPING THEM ABSORB 2 NITROGEN. IT WAS A NEW DISCOVERY. AND THE COURT SAID: 3 4 "I'M VERY SORRY, BUT IT'S NOT PATENTABLE BECAUSE IT 5 EXISTED IN NATURE. IT ALWAYS EXISTED IN NATURE, AND YOU 6 FOUND IT." 7 THE COURT DIDN'T CONSIDER WHETHER OR NOT THAT PREEMPTED 8 ALL USES OF THAT COMBINATION OF BACTERIA. SAID: 9 "SORRY, BUT THAT'S A DISCOVERY." THE WAY THAT YOU KNOW IT'S NOT PREEMPTION IS ALSO TAKE A 10 11 LOOK AT WHAT HAPPENED IN PARKER VERSUS FLOOK, RIGHT? 12 SO PARKER VERSUS FLOOK IS A PATENT APPLICATION WHICH COVERED A METHOD OF UPDATING ALARM LIMITS, OKAY? AND THOSE 13 ALARM LIMITS REFLECT CERTAIN NUMERICAL MEASUREMENTS OF 14 15 OPERATING CONDITIONS IN A CHAMBER. 16 SO THE ONLY THING THAT THE INVENTOR BROUGHT TO THE PATENT 17 CLAIM WAS A MATHEMATICAL FORMULA FOR UPDATING THE ALARM LIMITS. 18 THE COURT: YES, BUT HE STUCK IT IN THE MIDDLE AND DID IT. 19 NOBODY ELSE HAD DONE IT THAT WAY BEFORE. 20 MR. GINDLER: AND THE CLAIM WAS FOUND NOT PATENTABLE. 21 THE COURT: I KNOW. 22 MR. GINDLER: NOT PATENTABLE. NOT PATENTABLE BECAUSE THE 23 DISCOVERY OF A PHENOMENON OF NATURE OR MATHEMATICAL FORMULA 24 CANNOT SUPPORT A PATENT UNLESS THERE IS SOME OTHER INVENTIVE 25 CONCEPT IN ITS APPLICATION.

1 AND THEN, THE COURT GAVE ITS MOST -- GAVE THE GUIDANCE 2 WHICH IS QUOTED QUITE FREQUENTLY, WHICH IS THE PYTHAGOREAN 3 FORMULA WOULD NOT HAVE BEEN PATENTABLE OR EVEN PARTIALLY 4 PATENTABLE BECAUSE A PATENT APPLICATION CONTAINED A FINAL STEP 5 INDICATING THAT THE FORMULA WHEN SOLVED COULD BE APPLIED TO 6 EXISTING SURVEYING TECHNIQUES. 7 THESE CASES DON'T TALK ABOUT COMPLETE PREEMPTION. THERE'S 8 NO COMPLETE PREEMPTION AT ALL. PARKER VERSUS FLOOK DOESN'T 9 INVOLVE PREEMPTION OF THE USE OF THIS FORMULA. IT SAID: "THE ONLY THING YOU BROUGHT TO THE TABLE WAS THIS 10 11 MATHEMATICAL FORMULA. EVERYTHING THAT CAME BEFORE YOU WAS 12 WELL-KNOWN. YOU DON'T HAVE AN INVENTIVE CONCEPT." AND THAT IS THE FOCUS OF THE INQUIRY. DID THE INVENTORS 13 14 OF THE '540 PATENT BRING SOMETHING TO THE TABLE IN ADDITION TO 15 THE DISCOVERY OF A NATURAL PHENOMENON? 16 THAT'S THEIR CLAIM: THE DISCOVERY OF NATURAL PHENOMENON. 17 AND THE ANSWER IS THEY DIDN'T. 18 MYRIAD DOES NOT CHANGE THE OUTCOME OF THIS. SO REMEMBER 19 MYRIAD DEALS WITH THE FOLLOWING QUESTION: IS THE NATURALLY 20 OCCURRING GENETIC SEOUENCE OF THE BRCA1 AND BRCA2 GENES 21 PATENTABLE? AND IS A CDNA CONSTRUCT MADE IN A LAB PATENTABLE? 22 AND THE ANSWER WAS "NO," ON THE FIRST QUESTION, AND "YES," ON THE SECOND QUESTION. "YES" ON THE SECOND QUESTION BECAUSE 23 CDNA DOES NOT EXIST IN NATURE. YOU ARE NOT PATENTING A NATURAL 24 25 PHENOMENON.

1 THE CDNA TAKES OUT THE NONCODING REGIONS. ALL THE INTRONS 2 ARE GONE. THAT WAS THE BASIS ON WHICH THE COURT MADE THE DECISION 3 4 THAT CDNA, WHICH IS NOT FOUND IN NATURE, IT HAS NO COROLLARY IN 5 NATURE, IS PATENTABLE, BUT THAT THE GENE IS NOT PATENTABLE. 6 SO LET'S ASK THE NEXT QUESTION: IF THE DISCOVERY OF THE 7 LOCATION AND SEQUENCE OF THE BRCA GENE IS NOT PATENTABLE --8 THE COURT: WELL, IF THEY HAD SAID: 9 "THIS IS A METHOD FOR MAKING A LOT OF THESE BRCA GENES SO" --10 11 MR. GINDLER: IF THEY TRIED TO CLAIM -- IT'S A GOOD 12 QUESTION. SO LET'S TAKE A LOOK AT WHAT THE SUPREME COURT SAID 13 ABOUT METHOD CLAIMS, OKAY? 14 WHAT THE SUPREME COURT SAID IN MYRIAD, SAYS: 15 "IT IS IMPORTANT TO NOTE WHAT IS NOT IMPLICATED BY 16 THIS DECISION. FIRST, THERE ARE NO METHOD CLAIMS BEFORE 17 THIS COURT. HAD MYRIAD CREATED AN INNOVATIVE METHOD OF 18 MANIPULATING GENES WHILE SEARCHING FOR THE BRCA1 AND BRCA2 19 GENES, IT COULD POSSIBLY HAVE SOUGHT A METHOD PATENT." 20 BUT HERE'S THE INTERESTING LANGUAGE: 21 "BUT THE PROCESSES USED BY MYRIAD TO ISOLATE DNA," 22 OUOTE, 'WERE WELL UNDERSTOOD, WIDELY USED AND FAIRLY 23 UNIFORM INSOFAR AS ANY SCIENTIST ENGAGED IN THE SEARCH FOR 24 A GENE WOULD LIKELY HAVE UTILIZED A SIMILAR APPROACH.'" 25 WHAT DOES THAT TELL US ABOUT WHAT THE SUPREME COURT WOULD

1

DO WITH A CLAIM TO ISOLATE THE BRCA1 AND BRCA2 GENES THAT 2 RELIED UPON A METHOD THAT WAS: 3 "WELL UNDERSTOOD, WIDELY USED AND FAIRLY UNIFORM 4 INSOFAR AS ANY SCIENTIST ENGAGED IN THE SEARCH FOR A GENE 5 WOULD LIKELY HAVE UTILIZED A SIMILAR APPROACH"? 6 I THINK THE ANSWER IS IT'S NOT PATENTABLE BECAUSE THAT'S 7 WHAT THE COURT SAID IN MAYO VERSUS PROMETHEUS. 8 THE USE OF THIS LANGUAGE ISN'T A COINCIDENCE. THIS 9 LANGUAGE COMPLETELY MIRRORS THE LANGUAGE OF ROUTINE, 10 WELL-UNDERSTOOD, CONVENTIONAL ACTIVITY ENGAGED IN BY THE 11 SCIENTIFIC COMMUNITY AT THE TIME TO FIND SOMETHING THAT HAD 12 NEVER BEEN ISOLATED BEFORE, ACCORDING TO THE INVENTORS. THIS LANGUAGE IS HERE FOR A REASON. THE COURT IS MAKING 13 14 CLEAR THAT IT DOESN'T GET ANY BETTER IF YOU USE A 15 WELL-UNDERSTOOD, ROUTINE METHOD TO DISCOVER THE LOCATION AND 16 SEQUENCE OF A GENE. 17 THE COURT: HOW ABOUT IF YOU ARE LOOKING IN A PLACE NOBODY 18 EVER LOOKED BEFORE? 19 MR. GINDLER: IF YOU ARE USING CONVENTIONAL TECHNIQUES, IT 20 DOESN'T MAKE A DIFFERENCE. BUT KEEP IN MIND HERE THEY WEREN'T 21 EVEN LOOKING AT SOMETHING DIFFERENT. THEY ARE LOOKING AT SERUM 22 AND PLASMA, WHICH IS THE EXACT PLACE PEOPLE LOOKED PREVIOUSLY 23 FOR CELL-FREE DNA. 24 WHY? BECAUSE YOU TAKE ALL THE CELLS OUT OF SERUM OR PLASMA. IT'S THE PERFECT PLACE TO LOOK FOR CELL-FREE DNA 25

1 BECAUSE THERE AREN'T ANY CELLS. 2 THEN, IF YOU ARE GOING TO LOOK FOR CELL-FREE DNA, YOU 3 KNOW, LOOK FOR THE PLACE WHERE THERE ARE NO CELLS. AND IF YOU 4 FIND IT, OKAY. 5 SO THEY LOOKED. THEY FOUND IT. THEY LOOKED IN A PLACE 6 WHERE OTHER PEOPLE HAVE LOOKED. THEY LOOKED IN THAT PLACE 7 BECAUSE OTHER PEOPLE HAD LOOKED THERE, AND THEY USED THE SAME 8 METHODS THAT THE OTHERS HAD USED. 9 THIS IS NOT A CONTROVERSIAL POINT. IF YOU LOOK AT OUR 10 PAPERS WE REPEATEDLY QUOTE THE WORDS OF THE INVENTORS 11 THEMSELVES IN DESCRIBING THEIR METHODOLOGY AS "ROUTINE" AND AS 12 "CONVENTIONAL." AND THAT ANYONE SKILLED IN THE ART WOULD KNOW 13 HOW TO DETECT FETAL SEQUENCES USING THESE CONVENTIONAL AND 14 ROUTINE METHODS. 15 THAT IS WHAT THEY RELIED UPON. AND UNDER NEARLY FOUR 16 DECADES OF SUPREME COURT AUTHORITY IT'S NOT ENOUGH BECAUSE IT 17 DOESN'T GET YOU TO THE INVENTIVE CONCEPT THAT MUST BE PRESENT. 18 IT'S NOT MY WORDS "INVENTIVE CONCEPT." IT'S THE SUPREME 19 COURT'S WORDS IN PARKER VERSUS FLOOK, THE SUPREME COURT'S WORDS 20 IN MAYO VERSUS PROMETHEUS. 21 AND THE SUPREME COURT GAVE EVEN BETTER DEFINITION TO THOSE 22 WORDS "INVENTIVE CONCEPT" IN MAYO VERSUS PROMETHEUS IN DEALING 23 WITH METHOD CLAIMS IN THE LIFE SCIENCES.

IT'S NOT GOOD ENOUGH. IT DOESN'T GET YOU PATENT

ELIGIBILITY IF ALL THAT YOU DO IS USE ROUTINE, WELL-KNOWN

24

25

1 CONVENTIONAL TECHNIQUES IN CONNECTION WITH A NATURAL 2 PHENOMENON. 3 IT'S NOT PATENTABLE. 4 THE COURT: ALL RIGHT. THANK YOU. 5 MR. GINDLER: THANK YOU. 6 THE COURT: MR. MALECEK, SO WHAT IS THE INVENTIVE CONCEPT? 7 MR. MALECEK: YOUR HONOR, THE INVENTIVE CONCEPT WAS TO 8 TAKE A KNOWN METHOD AND TO LOOK AT IN A PLACE WHERE PEOPLE 9 WERE -- WHERE THE FEDERAL CIRCUIT AND ALL THE EXPERTS AGREE WERE THROWING WASTE AWAY TO LOOK THERE --10 11 THE COURT: OKAY. THEY WERE THROWING IT AWAY. MR. MALECEK: RIGHT. 12 13 THE COURT: AND THEY LOOKED THERE, AND THEY FOUND THIS. 14 MR. MALECEK: AND THEY SOLVED THE BACKGROUND PROBLEM BY 15 LOOKING SPECIFICALLY FOR PATERNALLY INHERITED NUCLEIC ACID AND 16 BY USING AMPLIFICATION. THE COURT: BUT START AGAIN. SO BEFORE THEY EVER GOT THE 17 18 PATENT, WHEN THEY WROTE THE ARTICLE THEY SAID: 19 "WE LOOKED IN THE SERUM, AND WE FOUND CELL-FREE DNA 20 FETAL," RIGHT? 21 MR. MALECEK: SO I WANT TO BE CLEAR ABOUT THE FACTUAL 22 SITUATION. THEY DID THE EXPERIMENTS IN THE FALL -- THE FIRST 23 EXPERIMENTS IN THE FALL OF 1996 AND CONTINUED TO DO THOSE 24 EXPERIMENTS. THOSE SAME EXPERIMENTS ARE BOTH REPORTED IN THE "LANCET" ARTICLE AND IN THE PATENT. THERE IS TREMENDOUS 25

```
1
      OVERLAP WITH THE PAPER AND THE PATENT.
 2
           THE COURT: OKAY.
          MR. MALECEK: THEY ARE BOTH CONTEMPORANEOUS. THE
 3
 4
      SCIENTIFIC WORK, THE WRITING OF THE PATENT. THE FACT IT
 5
      DOESN'T GET ISSUED UNTIL 2001 IS JUST THE TIME IN THE PATENT
 6
      OFFICE. BUT THE PATENT IS WRITTEN IN THAT TIME FRAME.
 7
           THE COURT: SO THEY DO THE WORK, AND THEY FIND THEM.
 8
          MR. MALECEK: CORRECT.
 9
          THE COURT: AND THAT'S A DISCOVERY THAT'S IMPORTANT. AND
      THEN, THE PATENT SAYS IT'S A METHOD OF --
10
11
          MR. MALECEK: AMPLIFYING AND DETECTING PATERNALLY
12
      INHERITED --
13
           THE COURT: -- AMPLIFYING AND DETECTING PATERNALLY
14
      INHERITED --
15
          MR. MALECEK: NUCLEIC ACIDS.
16
          THE COURT: -- NUCLEIC ACIDS.
17
          MR. MALECEK: CORRECT. AND --
18
           THE COURT: AND HOW DID THEY AMPLIFY THEM.
19
          MR. MALECEK: THEY AMPLIFIED THEM -- MOST OF THEIR
20
      EXPERIMENTS USED PCR.
21
           THE COURT: WHICH EVERYBODY KNEW ABOUT THAT.
22
          MR. MALECEK: EVERYBODY UNDERSTOOD HOW TO USE PCR.
23
           THE COURT: HOW DO THEY DETECT THEM?
24
          MR. MALECEK: IN MOST OF THEIR EXPERIMENTS THEY ALSO USED
25
     A LABEL, A FLUORESCENT LABEL WHICH --
```

1 THE COURT: WHICH PEOPLE --2 MR. MALECEK: -- PRESENCE DURING THE PRC REACTION. 3 THE COURT: A WELL-UNDERSTOOD WAY TO DO IT, RIGHT? 4 MR. MALECEK: THAT IS CORRECT. 5 THE COURT: SO WHAT IS THE INVENTIVE CONCEPT HERE? 6 MR. MALECEK: SO, FIRST OF ALL, I WOULDN'T AGREE THAT -- I 7 KNOW THAT'S A WORD THAT JUDGE LOURIE USED IN HIS OPINION, 8 "INVENTIVE CONCEPT." 9 I DON'T AGREE THAT THAT'S THE STANDARD. BUT THE INVENTIVE 10 CONCEPT WAS THE COMBINATION OF THESE INSIGHTS TO LOOK IN THAT 11 PLACE, TO USE AMPLIFICATION, TO LOOK SPECIFICALLY FOR THE 12 PATERNALLY INHERITED NUCLEIC ACIDS THAT ARE DIFFERENT FROM THE MOTHER'S, OKAY? 13 14 THE CASE LAW IS CLEAR. WHAT ARIOSA WOULD DO, AND WHAT I 15 WOULD DO IF I WERE IN THEIR SHOES, IS YOU WOULD CREATE A 16 CHECKLIST, A WORD DOCUMENT WITH A TABLE. AND YOU WOULD PUT THE 17 DIFFERENT ELEMENTS INTO THE TABLE. AND YOU WOULD SAY EITHER 18 "CONVENTIONAL," CHECK, OR "NATURAL PHENOMENON," CHECK. OKAY? 19 AND I DON'T DISAGREE THAT IF YOU GO THROUGH ALL THE 20 ELEMENTS IN THE CLAIM YOU COULD PUT A CHECK AS EITHER A 21 CONVENTIONAL ITEM OR A NATURAL PHENOMENON. 22 WE DON'T DISAGREE WITH THAT, OKAY? WE'RE NOT RUNNING AWAY 23 FROM THOSE STATEMENTS. 24 THE LAW IS CLEAR THAT WHILE YOU DO GO THROUGH THAT 25 EXERCISE TO UNDERSTAND WHAT HAS HAPPENED, YOU HAVE TO PUT IT

1 ALL BACK TOGETHER AGAIN. 2 THIS IS WHAT THE SUPREME COURT SAID VERY RECENTLY IN MAYO ABOUT THAT. EXCUSE ME. 3 4 THIS IS AT 22 -- 1298. THEY GO THROUGH THESE STEPS AND 5 THEY GET TO THE BOTTOM ONE, AND THEY SAY: 6 "FOURTH: WE HAVE TO CONSIDER THESE STEPS AS AN ORDER 7 COMBINATION." 8 IN THIS CASE, IN MAYO, IT DIDN'T ADD ANYTHING. AND WHY 9 DIDN'T IT ADD ANYTHING? LAST SENTENCE IN THAT COLUMN: 10 11 "ANYONE WHO WANTS TO MAKE USE OF THESE LAWS MUST 12 FIRST ADMINISTER THE DRUG AND MEASURE THE RESULTING 13 METABOLITE CONCENTRATIONS." AND SO THE COMBINATION AMOUNTS TO NOTHING MORE THAN THE 14 15 INSTRUCTIONS TO APPLY THE LAWS WHEN TREATING THEIR PATIENTS. 16 THE COURT: I'M SORRY. JUST READ THAT AGAIN, PLEASE. 17 MR. MALECEK: SO EVERYONE WHO DOES THIS HAS TO DO THE 18 STEPS. ONLY DOCTORS ARE GIVING PEOPLE DRUGS. SO ALL THE 19 PEOPLE THAT ARE PRACTICING THIS CLAIM ARE GOING TO GIVE THEIR 20 PATIENT A DRUG. 21 ALL THE DOCTORS THAT ARE PRACTICING THIS CLAIM WERE 22 ALREADY, BEFORE THIS CLAIM WAS WRITTEN, MEASURING THE LEVELS. 23 AND ALL THE DOCTORS THAT WERE ALREADY PRACTICING THIS CLAIM 24 WERE ALREADY ADJUSTING THEIR LEVELS BASED ON THIS. 25 THERE'S NO WAY TO ADMINISTER THESE DRUGS WITHOUT VIOLATING

1 THIS CLAIM. YOU'VE TOTALLY DOMINATED THAT NATURAL PHENOMENON. 2 THAT IS NOT TRUE IN EVERY DIMENSION OF THE '540 CLAIM. 3 AND I WOULD AGREE WITH THE COURT THAT THIS 101 JURISPRUDENCE 4 IS HARD AND SLIPPERY. BUT I WOULD NOT AGREE WITH THE COURT 5 THAT THIS IS A CLOSE QUESTION. 6 IF THE COURT IS CAREFUL AND EXAMINES THE CLAIM LANGUAGE AT 7 ISSUE IN EACH OF THESE CASES, THE PRIOR JURISPRUDENCE AND 8 COMPARES IT TO THE '540 CLAIM. AND IF THE COURT COMPARES --9 FOR EXAMPLE, LET ME START WITH THE PREEMPTION POINT. LOOK AT THE DISCUSSION OF PREEMPTION AND WHAT THEY FIND IS OUTSIDE OF 10 11 THE SCOPE OF THE CLAIMS. 12 IF THIS CASE GETS TO THE FEDERAL CIRCUIT AND GETS AN 13 OPINION ON THIS ISSUE, IT WILL BE THE FIRST ONE WHERE WE HAVE THREE PEER-REVIEWED ARTICLES TAKING ADVANTAGE OF AN UNDERLYING 14 15 NATURAL PHENOMENON, A CELL-FREE DNA, WITHOUT PRACTICING THE 16 '540 PATENT ON THREE DIFFERENT REASONS. 17 ONE IS YOU CAN DO IT WITHOUT AMPLIFYING. 18 ANOTHER IS YOU CAN DO IT WITHOUT DISTINGUISHING BETWEEN 19 THE MATERNAL AND THE PATERNAL. 20 AND THE THIRD JUST SLIPPED OUT OF MY MIND. BUT IT'S 21 FRACTIONATION. YOU CAN DO IT ON THE WHOLE BLOOD, NOT JUST ON 22 THE CELL (SIC) OR PLASMA. THAT IS WHAT THEIR OWN EXPERT 23 PUBLISHED ON. 24 THIS WILL BE THE CLEAREST CASE OF ESTABLISHED FACTS

SHOWING THAT THE '540 PATENT DOES NOT DOMINATE THE USE OF

25

1 CELL-FREE FETAL DNA EVER. 2 THE COURT: SAY AGAIN THOSE THREE THINGS THAT YOU SAY ARE 3 DIFFERENCES. 4 MR. MALECEK: RIGHT. SO THESE ARE SUMMARIZED IN OUR REPLY 5 BRIEF. I THINK -- AND I'LL GET THE PAGE FOR YOU IN A MINUTE. 6 I THINK IT'S 20 SOMETHING AGAIN. 7 BUT BISCHOFF WAS THEIR EXPERT IN THIS AREA, AND SHE HAS A 8 PEER-REVIEWED PUBLICATION WHERE SHE SAID: 9 "LOOK, I'M INTERESTED IN DR. LO'S WORK. I'VE BEEN IN THIS FIELD FOR A LONG TIME. I'M GOING TO SEE IF I CAN DO 10 11 THIS IN WHOLE BLOOD." 12 AND SHE DID. SHE SUCCESSFULLY DID IT IN THE WHOLE BLOOD. 13 THE COURT: SOMEBODY DID IT IN THE WHOLE BLOOD, AND TWO 14 OTHER WAYS, BUT NOBODY DID IT IN SERUM. 15 MR. MALECEK: NO, DR. LO DID IT IN SERUM. THE POINT IS 16 THAT AFTER THE '540 PATENT IS OUT THE JURISPRUDENCE OF THE 101 17 CLEARLY DIRECTS US TO LOOK AND SEE IF YOU CAN USE THE 18 UNDERLYING NATURAL PHENOMENON WITHOUT USING THE PATENT, RIGHT? 19 THAT'S WHAT THE PREEMPTION ANALYSIS IS. 20 AND IT IS A CLEAR DIRECTION FROM THE SUPREME COURT AND THE 21 FEDERAL CIRCUIT THAT WE SHOULD ENGAGE IN THAT PREEMPTION 22 ANALYSIS. 23 THE COURT: WELL, I GUESS ONE OF THE ISSUES ON THAT -- AND 24 I ACTUALLY DON'T THINK THAT IS THE DISPOSITIVE ISSUE HERE. BUT 25 LET'S SAY WE'RE TALKING ABOUT THAT, AND YOUR PATENT SAYS IT'S A

```
1
      WAY TO IDENTIFY MATERNALLY INHERITED CELL-FREE --
 2
          MR. MALECEK: DNA.
          THE COURT: -- FETAL DNA IN THE MOTHER'S SERUM. AND THE
 3
 4
     METHOD IS YOU AMPLIFY THE SERUM AND YOU FIND IT.
 5
          MR. MALECEK: UNDERSTOOD, JUDGE. SO WHAT IS THE NATURAL
 6
      PHENOMENON?
 7
          THE COURT: AND YOU CAN AMPLIFY IT PRESUMABLY ANY WAY YOU
 8
      WANT. AND YOU CAN FIND IT ANY WAY YOU WANT. SO IF YOU ARE
 9
      GOING TO BE LOOKING FOR THE CELL-FREE DNA IN THE MOTHER'S
      SERUM, WHICH YOU ARE NOW THAT THEY FIGURED OUT IT'S THERE,
10
11
      PRETTY MUCH ANYTHING YOU DO IS GOING TO BE --
12
          MR. MALECEK: NO. THAT IS WHERE THE COURT IS WRONG, WRONG
13
     AS THE DAY IS LONG. YOU CAN -- THERE'S -- THE NATURAL
14
      PHENOMENON IS THE CELL-FREE FETAL DNA.
15
          THE COURT: RIGHT.
16
          MR. MALECEK: IT'S THERE. YOU CAN FIND IT WITHOUT
     AMPLIFYING, PERIOD. PEER-REVIEWED LITERATURE --
17
18
          THE COURT: WOULDN'T ANY LOGICAL PERSON AMPLIFY IT FIRST
19
      SO THERE WILL BE MORE TO FIND?
20
          MR. MALECEK: NOT NECESSARILY. THESE PEOPLE HAVE -- I'M
21
     NOT MAKING THIS UP, JUDGE. THIS IS PEER-REVIEWED SCIENTIFIC
22
      LITERATURE ON A NEXT-GEN SEQUENCING MACHINE PUT OUT BY A
23
      COMPANY CALLED "HELICOS," OKAY?
24
          NOW, THEY MAKE FUN OF THAT BECAUSE HELICOS WENT OUT OF
25
      BUSINESS BECAUSE THEIR MACHINE WAS REALLY EXPENSIVE.
```

1 THE COURT: AND THEY DIDN'T GET ENOUGH, SO THEY HAD TO 2 AMPLIFY BEFORE THEY COUNTED IT, RIGHT? MR. MALECEK: MACHINE WORKS. THEY TESTED REAL FETAL 3 4 SAMPLES. THE ARTICLES ARE IN THE RECORD, JUDGE. THEY DID THIS 5 WITHOUT AMPLIFICATION. WHICH, BY THE WAY, OFFERS -- THAT 6 INNOVATION OF DOING IT WITHOUT AMPLIFICATION OFFERS SCIENTIFIC 7 BENEFITS, BECAUSE THE AMPLIFICATION STEPS CAN GIVE YOU WRONG 8 ANSWERS, RIGHT? 9 AND SO DOING IT WITHOUT AMPLIFICATION IS MORE PRECISE. AND YOU CAN READ THE LITERATURE. AND RIGHT IN THERE THEY 10 11 DESCRIBE THAT THIS IS AN ADVANTAGE, AND INNOVATION OUTSIDE OF 12 THE '540 USING THE UNDERLYING NATURAL PHENOMENON WITHOUT 13 AMPLIFICATION. 14 OKAY? PEER-REVIEWED SCIENTIFIC LITERATURE. NOT A 15 SINGLE -- THERE'S CASES THROUGHOUT THE 101, SOME ON ONE SIDE, 16 SOME ON THE OTHER. NOT ONE OF THEM HAS POINTED TO 17 PEER-REVIEWED LITERATURE AS SAYING: 18 "THIS IS WHAT SHOWS THERE IS NO PREEMPTION." 19 IT'S: 20 "WELL, IT COULD HAVE BEEN DONE THIS WAY." 21 IT'S SPECULATION, SO ON AND SO FORTH. 22 THAT'S ONE EXAMPLE OF PEER-REVIEWED LITERATURE. 23 SECOND EXAMPLE OF PEER-REVIEWED LITERATURE: THEIR EXPERT, 24 THE EXPERT THEY CHOSE, BISCHOFF, DID THIS IN WHOLE BLOOD. THE 25 ARTICLE IS PART OF THE RECORD BEFORE THIS COURT.

1 SO YOU DO NOT HAVE TO FRACTIONATE THE BLOOD. YOU CAN USE 2 THE WHOLE BLOOD IF YOU WANT, OKAY? 3 AGAIN, THAT IS OUTSIDE OF THE '540. THAT IS USING THE 4 CELL-FREE DNA WITHOUT PRACTICING THE '540 PATENT, OKAY? 5 EXAMPLE NUMBER TWO: PEER-REVIEWED. 6 EXAMPLE NUMBER THREE: DR. LO'S LAB. YOU'VE HEARD -- THE 7 COURT'S HEARD A COUPLE DIFFERENT TIMES ABOUT THE METHYLATION 8 DIFFERENCES THAT ARE NOT INHERITED FROM THE MOTHER OR THE 9 FATHER. AND THEY HAVE BEEN ABLE TO DEMONSTRATE THAT YOU CAN USE 10 11 THOSE DIFFERENCES TO DISTINGUISH THE FETAL DNA. NOT BECAUSE 12 YOU KNOW IT'S FROM MOM OR DAD, BUT BECAUSE YOU CAN SEE THAT THE 13 FETAL DNA IS METHYLATED DIFFERENTLY. 14 AGAIN, SCIENTIFIC PUBLICATION, PEER-REVIEWED, REAL 15 SAMPLES, REAL RESULTS, USING THE UNDERLYING NATURAL PHENOMENON 16 OF CELL-FREE DNA WITHOUT USING THE '540. 17 THIS IS NOT A CLOSE CASE WHEN YOU HAVE THREE CONCRETE 18 EXAMPLES ABOUT THREE DIFFERENT AXES IN THE PATENT, THREE 19 DIFFERENT ELEMENTS OF THE PATENT THAT ARE REQUIRED TO PRACTICE 20 IT THAT YOU DON'T PRACTICE. 21 IT'S AS CLEAR AS THE DAY IS LONG THAT THAT PREEMPTION 22 ANALYSIS MAKES THIS PATENT NOT DOMINATE THE AREA. AND THE 23 JURISPRUDENCE IS ALSO CLEAR THAT THE CHECK BOXES IS NOT THE 24 END. YOU HAVE TO PUT THINGS BACK TOGETHER AND DO THE 25 PREEMPTION ANALYSIS. OKAY?

1 AND JUDGE LOURIE AND JUDGE RADER BOTH AGREED WITH THAT, 2 ALL RIGHT? THAT THE PREEMPTION ANALYSIS MUST BE DONE. IT'S 3 NOT SIMPLY DISSECTING THE CLAIM. AND THE LAW IS VERY CLEAR 4 ABOUT THAT. 5 I WANT TO MAKE --6 THE COURT: THE LAW IS VERY CLEAR ABOUT THAT? 7 MR. MALECEK: IT IS. 8 THE COURT: TWO OUT OF THE SEVEN SAID THAT. 9 MR. MALECEK: OF THE OPINIONS IN FRONT OF CLS? 10 THE COURT: YES. 11 MR. MALECEK: I THINK THEY ALL AGREE THAT PREEMPTION 12 ANALYSIS SHOULD BE DONE. RADER ACTUALLY --13 THE COURT: YOU SAY IT --14 MR. MALECEK: YES. I THINK JUDGE RADER ACTUALLY WOULD --15 HE HAS THAT FUNNY LAST -- DO WE COUNT IT AS AN OPINION, HIS 16 NOTE, HIS PERSONAL REFLECTION? 17 AND THERE HE SAYS: "I WISH WE WOULDN'T HAVE TO DO THIS PREEMPTION STUFF 18 19 BECAUSE I THINK WE'VE GONE TOO FAR DOWN THIS PATH." 20 AND ONE OF THE OTHER POINTS I WANT TO MAKE SURE TO MAKE 21 TODAY IS THE POINT THAT HE MAKES IN THAT REFLECTION, WHICH IS: 22 "CAN'T WE JUST START WITH THE STATUTE," RIGHT? 23 SO THERE'S NO DISPUTE -- I THINK WE WANT TO BE CLEAR ABOUT 24 THAT -- THAT THIS IS -- THAT THE STATUTE 101 THAT SAYS WHAT CAN 25 BE ELIGIBLE TO BE PATENTED, BECAUSE THAT'S WHAT WE'RE TALKING

1 ABOUT, SAYS: 2 "WHOEVER INVENTS OR DISCOVERS," OKAY? 3 "DISCOVERY" IS NOT A BAD WORD IN THE PATENT STATUTE. 4 WE'VE TRIED TO MAKE IT INTO A BAD WORTH IN THIS CASE, BUT IT'S 5 NOT. IF YOU DISCOVER SOMETHING, THAT'S A GOOD THING IN THE 6 PATENT STATUTE'S VIEW. 7 "ANY NEW OR USEFUL PROCESS, MACHINE, MANUFACTURE OR 8 COMPOSITION OF MATTER OR ANY NEW AND USEFUL IMPROVEMENT 9 THEREOF MAY OBTAIN A PATENT THEREFORE SUBJECT TO THE REMAINING PRONGS OF THE STATUTE." 10 11 AND IT'S CLEAR THAT THAT IS THIS OPENING ELIGIBILITY. AND 12 JUDGE RADER IS TRYING TO REIN US ALL BACK IN AND SAY: 13 "THIS IS WHAT IS ELIGIBLE. THIS IS THE TOP OF THE 14 PIPELINE OF THINGS THAT CAN COME INTO THE PATENTING 15 PROCESS, "OKAY? 16 SO I WANTED TO MAKE SURE THAT WE DIDN'T LOSE TRACK OF THE 17 FACT THAT THAT'S THE STATUTE WE'RE TRYING TO UNDERSTAND. 18 SECOND OF ALL, SO THEN WE GET TO A POINT WHERE WE'RE 19 SAYING: 20 "BUT IS IT AN EXCEPTION? IS IT AN EXCEPTION TO THE BREADTH OF THAT?" 21 22 THAT'S WHAT WE'RE TRYING TO FIND OUT. AND WE'RE TRYING TO 23 FIND THAT OUT UNDER A CLEAR AND CONVINCING STANDARD THAT THEY 24 BEAR THE PROOF OF. 25 AND, AGAIN, I WOULD -- AS I STRUGGLE TO GET MY HEAD AROUND

1 LOTS OF VERY SLIPPERY LANGUAGE, I GO BACK TO FACTS. I GO BACK 2 TO LAW SCHOOL AND I COMPARE FACTS OF CLAIMS TO FACTS OF CLAIMS. 3 THE FUNK BROTHERS CLAIM WAS COMBINE ANY BACTERIAS THAT 4 DON'T INTERFERE WITH EACH OTHER, PERIOD. PERIOD. THAT WAS IT. 5 THAT WAS FOUND PATENT-INELIGIBLE. 6 AND THIS IS RIGHT IN FOOTNOTE ONE OF IT: 7 "AN INOCULANT FOR THE PLANTS COMPRISING A PLURALITY 8 OF SELECTED MUTUALLY NON-INHIBITED STRAINS OF DIFFERENT 9 SPECIES OF BACTERIA, SUCH STRAINS BEING UNEFFECTED BY EACH OTHER." 10 11 ANY STRAINS YOU PICK. I'M NOT TELLING YOU WHICH ONES. 12 COMBINED TOGETHER AS LONG AS THEY DON'T INHIBIT EACH OTHER, 13 WHICH I'M NOT TELLING YOU, YOU KNOW, WHICH ONES DO AND DO NOT 14 INHIBIT EACH OTHER. 15 THAT'S THE CLAIM THAT WAS INVALIDATED, RIGHT? 16 AND THERE'S A LOT OF DISCUSSION ABOUT HOW THAT DISCOVERY 17 COULD HAVE LED TO LOTS OF OTHER PATENTS. BUT THAT PARTICULAR 18 CLAIM IS INVALID. 19 IT GOES BACK TO THE: HERE'S A NATURAL PHENOMENON. APPLY 20 IT. 21 LOOK AT MYRIAD, RIGHT? THE FEDERAL CIRCUIT HAS ASKED US 22 TO LOOK AT MYRIAD TO GET DIRECTION. THREE CLAIMS THIS COURT 23 SHOULD HAVE IN MIND WHEN IT STUDIES MYRIAD AND IS COMPARING 24 THIS TO THE '540. 25 THE FIRST CLAIM IS THE CLAIM THAT WAS HELD INVALID. THAT

1 CLAIM READS: 2 "AN ISOLATED DNA CODING FOR A BRCA 1 POLYPEPTIDE, 3 SAID POLYPEPTIDE HAVING THE AMINO ACID SEQUENCES SET FORTH 4 IN SEQUENCE I.D. NUMBER TWO." STOP. 5 THEY GOT A PATENT ON THE SEQUENCE THAT EXISTS IN OUR HUMAN 6 GENOME, OKAY? 7 MYRIAD WAS ARGUING BECAUSE WE PULL THAT OUT, 3 BILLION 8 BASE PAIRS, WE STOP AT THIS END AND STOP AT THIS END AND PULL 9 IT OUT AND ISOLATE IT. THAT SHOULD BE PATENTABLE. AND THE SUPREME COURT SAID: 10 11 "NO. JUST ISOLATING IT, YOU KNOW, ARGUABLY CHANGES 12 IT FROM ONE MOLECULE TO ANOTHER, BUT THAT'S NOT ENOUGH.'. OKAY? WE KNOW THAT. THAT HOW MUCH ABOVE THAT DO I HAVE 13 14 TO GO TO GET A PATENT? RIGHT? 15 WE HAVE SOME GUIDANCE ON THAT. FACTUAL GUIDANCE IN 16 MYRIAD. CDNA. THE NEXT CLAIM, CLAIM TWO, IS VALID. THE 17 ISOLATED DNA OF CLAIM ONE: 18 "WHEREIN SAID DNA HAS THE NUCLEOTIDE SEQUENCE SET 19 FORTH IN SEQUENCE I.D. NUMBER ONE, "PERIOD. FULL STOP. 20 THAT CLAIM IS VALID UNDER MYRIAD. OKAY? 21 HOW DOES CDNA GET CREATED? DESCRIBED IN MYRIAD. 22 DESCRIBED AT 212: 23 "YOUR MESSENGER RNA NATURALLY, THROUGH NO 24 INTERVENTION OF A SCIENTIST, TAKES OUT THE EXONS AND 25 CODONS AND IT'S RNA RATHER THAN DNA."

1 THAT'S A NATURAL SEQUENCE THAT OCCURS IN NATURE. 2 YOU PUT IN AN ENZYME AND NUCLEOTIDES AND MAKE A COPY OF THAT, AND IT'S CDNA. PATENTABLE. 3 4 PAGE 2119 OF THE OPINION, FOLKS ARE ARGUING ABOUT THE MRNA 5 IS NATURALLY OCCURRING. THEY NEVERTHELESS ARGUE THAT CDNA IS 6 NOT PATENT-ELIGIBLE BECAUSE THE NUCLEOTIDE SEQUENCE OF THE CDNA 7 IS DICTATED BY NATURE, NOT BY THE LAB TECHNICIAN. 8 SUPREME COURT: 9 "THAT MAY BE SO, BUT THE LAB TECHNICIAN UNQUESTIONABLY CREATES SOMETHING NEW WHEN CDNA IS MADE." 10 11 THAT'S WHERE THEY DREW THE LINE, JUDGE: MAKING A COPY OF 12 A GENETIC SEQUENCE THAT EXISTS IN NATURE, CHANGING IT FROM MRNA 13 TO CDNA IS PATENTABLE, OKAY? I THINK YOU'VE GOT TO HAVE THESE FACTUAL ROADMAPS FROM 14 15 MYRIAD IN MIND WHEN YOU MAKE THE DECISION. 16 SECTION THREE OF THIS OPINION -- A UNANIMOUS AND 17 RELATIVELY SHORT OPINION. THAT'S A MIRACLE IN TODAY'S DAY AND 18 AGE -- GIVES FURTHER GUIDANCE. THE SUPREME COURT TOOK AN EXTRA 19 STEP. IT HAS THREE PARAGRAPHS IN SECTION THREE. 20 IT'S AT 219 TO 220. THE FIRST PARAGRAPH WAS WHAT MR. 21 GINDLER WAS FOCUSING ON. 22 THE SECOND PARAGRAPH IS ANOTHER VERY IMPORTANT PLACE FOR 23 THIS COURT TO TURN TO UNDERSTAND MYRIAD BECAUSE IT POINTS US TO 24 A THIRD TYPE OF CLAIM THAT IS PATENTABLE. 25 THE COURT: WHY DON'T YOU READ THE SECOND ONE AGAIN, AND

1	THEN READ IF THERE ARE THREE PARAGRAPHS THERE, TELL ME WHAT
2	THE FIRST I KNOW HE ABOUT IT, BUT SAY IT AGAIN, AND THEN DO
3	THE SECOND.
4	MR. MALECEK: OKAY. I WON'T READ THEM ALL, BECAUSE THEY
5	ARE A LITTLE LONG. BUT I'LL PUT ENOUGH IN THE RECORD SO YOU
6	CAN GET TO THEM.
7	IT'S A THREE-PARAGRAPH SECTION. IT HAS THREE AT THE TOP
8	OF THE HEADING. IT'S AT 219 AND 220.
9	THE FIRST ONE IS THERE ARE "IT'S IMPORTANT TO NOTE WHAT
10	IS NOT IMPLICATED BY THIS DECISION." THAT'S THE OPENING OF THE
11	SECTION.
12	"THE FIRST THERE ARE NO METHOD CLAIMS. AND HAD
13	MYRIAD COME UP WITH SOME NEW METHOD FOR FINDING THE BRCA
14	GENES THAT WOULD BE PATENTABLE," IS THE NEGATIVE
15	IMPLICATION, ALL RIGHT? BUT THEY DIDN'T. THEY USED
16	CONVENTIONAL MEANS.
17	THE COURT: OKAY? HAD THEY COME UP WITH A NEW METHOD,
18	WHICH THEY DID NOT.
19	MR. MALECEK: RIGHT. AND THAT'S WHAT MR. GINDLER WAS
20	REFERRING TO.
21	THE SECOND PARAGRAPH SAYS:
22	"SIMILARLY, THIS CASE DOES NOT INVOLVE PATENTS
23	ON NEW APPLICATIONS," ITALICIZED, THEIR ITALICS, "OF
24	KNOWLEDGE ABOUT THE BRCA AND BRCA2 GENES," JUDGE BRYSON
25	APTLY NOTED.

34 Case 3:11-cv-06391-SI Document 253 Filed 10/30/13 Page 34 of 44 1 SO THEY ARE APPROVINGLY REACHING OUT TO A REMARK THAT 2 JUDGE BRYSON MADE BELOW IN THE DISSENT. 3 "AS THE FIRST PARTY WITH KNOWLEDGE OF THE BRCA1 AND 4 BRCA2 SEOUENCES" -- THE DISCOVERER, RIGHT? -- MYRIAD WAS 5 IN AN EXCELLENT POSITION TO CLAIM APPLICATIONS OF THAT 6 KNOWLEDGE. MANY OF ITS UNCHALLENGED CLAIMS ARE LIMITED TO 7 SUCH APPLICATIONS." 8 CITING TO 689 F.3D AT 1349. 9 IF THE COURT WERE TO GO TO 689 F.3D AT 1349, THERE IS A 10 CITATION IN BRYSON'S OPINION IMMEDIATELY AFTER THAT TO THE 11 CLAIMS THAT HE HAS IN MIND. THAT INCLUDES CLAIM 21 OF THE '441 PATENT, WHICH WE HAVE REPRODUCED IN ITS ENTIRETY AT PAGE 12 OF 12 13 OUR OPPOSITION BRIEF. 14 HAVING DISCOVERED BRCA1 AND BRCA2 GENES, BRYSON AND THE 15 SUPREME COURT SAID: 16 "YOU MIGHT BE ELIGIBLE FOR AN APPLICATION OF THAT 17 KNOWLEDGE THAT READS LIKE THIS: THE METHOD OF CLAIM 20 18 WHEREIN A GERMLINE ALTERATION" -- A MUTATION -- "IS 19 DETECTED BY HYBRIDIZING A BRCA1 GENE PROBE WHICH 20 SPECIFICALLY HYBRIDIZES TO AN ALLELE OF ONE OF SAID 21 ALTERATIONS TO RNA ISOLATED FROM SAID HUMAN SAMPLE AND

DETECTING THE PRESENCE OF A HYBRIDIZATION PRODUCT WHEREIN THE PRESENCE OF SAID PRODUCT INDICATES THE PRESENCE OF SAID ALLELE IN THE SAMPLE." FOR 20 PLUS YEARS BEFORE THERE WAS PCR, YOU COULD DO

22

23

24

25

```
1
      HYBRIDIZATION OF A PROBE TO SEE IF A SEQUENCE WAS PRESENT IN A
 2
      GENE. THAT IS WHAT THEY CLAIMED HERE. HYBRIDIZE A PROBE, A
 3
      WELL-KNOWN CONVENTIONAL ACTIVITY FOR DETERMINING WHETHER A
 4
      PARTICULAR MUTATION OF THE BRCA1 OR BRCA2 GENE ARE PRESENT.
 5
          AND THAT IS WHAT JUDGE BRYSON TOOK THE TIME TO CALL OUT AS
 6
      THE KIND OF THING A DISCOVERER WOULD BE ABLE TO PATENT.
 7
          AND THE SUPREME COURT MADE THE EFFORT TO INCLUDE IN ITS
 8
      OPINION, ADMITTEDLY DICTA, TO GIVE GUIDANCE TO COURTS LIKE
 9
      THIS: THAT'S THE KIND OF CLAIM WE SHOULD EXPECT A DISCOVERER
      TO HAVE. PURELY CONVENTIONAL ACTIVITY, HYBRIDIZATION PROBES,
10
11
      TO DETECT A SEQUENCE THAT THEY HAD DISCOVERED, OKAY?
12
           THREE CLAIMS ARE PRESENT IN THIS MYRIAD DECISION FOR THE
13
      COURT TO COMPARE THE SCOPE OF TO THE SCOPE OF THE '540.
14
           IT'S A WAY TO GET OUT OF THE TRAP OF TRYING TO UNDERSTAND
15
      WHAT THESE VAGUE WORDS MEAN AND MAKE A REAL COMMON LAW, LAW
16
      SCHOOL FACTUAL COMPARISON OF: WHAT IS THE CLAIM?
17
          PREEMPTION SERVES A SIMILAR PURPOSE BECAUSE, YOU KNOW, THE
18
      COURTS THEMSELVES ARE OBVIOUSLY STRUGGLING WITH HOW TO DO THIS.
19
      AND THE WORDS THEMSELVES DON'T REALLY PROVIDE GUIDANCE.
20
           IT'S GOT TO BE A FACTUAL ANALYSIS. AND THERE IS NOT A
21
      SINGLE CASE YET WHERE THE 101 ANALYSIS HAS BEEN SHOWN NOT TO
22
      PREEMPT THE ATTACKED CLAIM NOT --
23
           THE COURT: LET'S SAY --
24
           MR. MALECEK: -- TO PREEMPT WITH THREE DIFFERENT ARTICLES.
25
           THE COURT: -- I WANT TO WRITE AN OPINION IN YOUR FAVOR.
```

1 MR. MALECEK: YES. 2 THE COURT: AND I WANT TO START OUT BY SAYING: 3 "WELL, EVERYBODY, THEY HAD THE INVENTORS HERE HAD 4 GIVEN TO THE WORLD THE SCIENTIFIC UNDERSTANDING THAT 5 THERE'S FETAL DNA FRAGMENTS IN THE MOM'S PLASMA." 6 MR. MALECEK: ABSOLUTELY. 7 THE COURT: BUT IN ADDITION THIS PATENT DOES WHAT? WHAT 8 DO I SAY? 9 MR. MALECEK: IT REQUIRES AMPLIFICATION WHICH IS NOT 10 NECESSARY TO USE THAT NATURAL PHENOMENON. IT REQUIRES THE USE OF A PLASMA AND SERUM SAMPLE, WHICH IS NOT NECESSARY TO USE THE 11 12 UNDERLYING NATURAL PHENOMENON. 13 IT REQUIRES THE DETECTION OF PATERNALLY INHERITED NUCLEIC 14 ACIDS WHICH ARE DIFFERENT FROM THE MOTHERS' WHICH IS NOT 15 REQUIRED TO USE THE UNDERLYING NATURAL PHENOMENON. 16 "AND WHEN I SAY" -- SPEAKING FOR YOU NOW -- "WHEN I SAY IT 17 DOESN'T REQUIRE THE USE OF THESE THINGS, I'M NOT MAKING 18 THIS UP. IT'S BASED ON PEER-REVIEWED SCIENTIFIC 19 PUBLICATIONS USING REAL SAMPLES FROM REAL PREGNANT WOMEN, 20 AND IT WORKED. AND IF THAT DOESN'T SHOW -- IF I'M HERE 21 STRUGGLING AS A DISTRICT COURT JUDGE, AND I'M BEING TOLD 22 TO USE PREEMPTION AS A TOOL TO UNDERSTAND THIS, HOW CAN 23 I -- THIS IS THREE DIFFERENT WAYS THAT YOU CAN USE THE 24 UNDERLYING PHENOMENON AND BE OUTSIDE OF THREE INDEPENDENT 25 CLAIM LIMITATIONS."

1 INDEPENDENT CLAIM LIMITATIONS. THIS GOES FARTHER THAN ANY 2 OTHER 101 CASE TO DATE IN DEMONSTRATING A LACK OF PREEMPTION. 3 THE COURT: OKAY. SO WHAT I'M TO SAY IS THE NEW IDEA HERE 4 IS, WELL, THERE WOULD BE OTHER WAYS TO DO IT, SO IT'S NOT 5 PREEMPTED. SO THE NEW IDEA IS THIS IS A COMPLETELY TRADITIONAL 6 WAY TO DO IT, BUT IT DOESN'T PREEMPT OTHER WAYS TO DO IT. IS 7 THAT THE NEW IDEA? 8 MR. MALECEK: THAT'S EXACTLY RIGHT, YOUR HONOR. 9 THE COURT: WELL, THAT DOESN'T SOUND LIKE MUCH OF A NEW IDEA. A COMPLETELY TRADITIONAL WAY TO DO IT, BUT THERE MIGHT 10 11 BE OTHER WAYS. SO MY NEW IDEA IS A COMPLETELY TRADITIONAL WAY 12 TO DO IT. MR. MALECEK: YOUR HONOR, I THINK THAT YOU ARE FALLING 13 INTO THE TRAP THAT THE CASES TRY AND STEER US AWAY FROM. 14 15 THEY SAY I GO THROUGH THINGS, AND I CHECK IF IT'S 16 CONVENTIONAL. I CHECK IF IT'S A PHENOMENON OR AN ABSTRACT IDEA, WHATEVER, RIGHT. 17 18 THE COURT: I'M JUST TRYING TO ISOLATE THE NEW IDEA THAT 19 IS HERE. 20 MR. MALECEK: RIGHT. THE NEW IDEA WAS TO USE THOSE 21 CONVENTIONAL TECHNIQUES TO DETECT A SPECIFIC THING IN A 22 SPECIFIC WAY THAT HAD NEVER BEEN DONE BEFORE AND CHANGE THE WAY 23 THAT PRENATAL DIAGNOSIS WAS DONE. 24 I MEAN, THERE'S 1700 CITATIONS TO THAT "LANCET" ARTICLE, 25 JUDGE. ALL THE EXPERTS, INCLUDING PEOPLE WHO ARE ON THE

```
1
      SCIENTIFIC ADVISORY BOARDS OF THESE COMPANIES, WE PUT THIS IN
 2
      THE RECORD IN THE PI AND ELSEWHERE, SAID IT CHANGED THE NATURE
 3
      OF PRENATAL AND NONINVASIVE DIAGNOSIS.
 4
           THE COURT: "IT." WHAT WAS "IT? "IT" WAS THE DISCOVERY
 5
      OF THE CELL-FREE FETAL DNA IN THE SERUM.
 6
          MR. MALECEK: CORRECT.
 7
           THE COURT: THAT IS WHAT CHANGED EVERYTHING.
 8
          MR. MALECEK: CORRECT. AND THE PATENT STATUTE THAT WE'RE
 9
      TALKING ABOUT, SECTION 101 SAYS:
                "ANY" -- I HAVE TO READ IT CORRECTLY, NOT JUST MAKE
10
11
      IT UP, RIGHT?
12
                "WHOEVER INVENTS OR DISCOVERS ANY NEW OR USEFUL
13
          PROCESS, MACHINE, MANUFACTURE, COMPOSITION OF MATTER OR
14
          NEW AND USEFUL IMPROVEMENTS THEREOF MAY OBTAIN A PATENT."
15
          WE HAVE DENIGRATED THE IDEA THAT THERE'S A DISCOVERY HERE
16
      AND, THEREFORE, YOU CAN'T USE CONVENTIONAL TECHNIQUES AND
17
      COMBINE THEM WITH THE DISCOVERY AND HAVE AN INVENTION.
18
           THAT'S JUST NOT WHERE THE LAW IS. IF YOU MAKE A NEW
19
      DISCOVERY AND CAN -- YOU'RE EINSTEIN. YOU DISCOVER E EQUALS MC
20
      SOUARED, AND YOU GO OUT AND USE THINGS THAT ARE IN THE WORLD TO
21
      APPLY THAT TO MAKE A MACHINE THAT DOES SOMETHING THAT'S
22
      DEPENDENT ON THAT. THAT'S STILL A NEW INVENTION. AND THAT'S
23
     WHAT THEY DID.
24
          THEY HAD AN INSIGHT, A DISCOVERY. AND THEY CAME UP
25
      WITH -- THEY USED CONVENTIONAL TOOLS TO MAKE IT USEFUL TO OTHER
```

```
1
      PEOPLE. AMPLIFY IT. LOOK FOR THE PATERNALLY INHERITED NUCLEIC
 2
      ACIDS, SOME TINY FRACTION OF WHAT IS IN THAT SAMPLE. AND
 3
      DISTINGUISH THEM FROM THE MOTHER, AND THEN YOU KNOW YOU'VE
 4
      DETECTED FETAL NUCLEIC ACIDS.
 5
           THAT WAS AN INVENTION THAT HAS CHANGED THE WAY PEOPLE ARE
 6
     PRACTICING MEDICINE.
 7
           THE COURT: WELL, I THINK THERE'S REALLY NO QUESTION ABOUT
 8
      THAT. THE DISCOVERY OF --
 9
          MR. MALECEK: SO, YOUR HONOR --
10
           THE COURT: NO QUESTION ABOUT THAT.
11
          MR. MALECEK: I AGREE. THIS 101 JURISPRUDENCE IS
      DIFFICULT TO TACKLE. JUDGE RADER IS MAKING FUN OF IT HIMSELF
12
13
     AS WRITES AN OPINION, AND THEN WRITES A SEPARATE NOTE THAT SAYS
14
      HE DOESN'T LIKE IT, OKAY?
15
           THEY ARE THE BOSSES, AND THEY ARE STRUGGLING WITH IT.
16
     RIGHT?
17
          BUT THEY HAVE GIVEN US -- THERE ARE SOME PLACES THAT WE
18
      CAN RETURN TO AND BE COMFORTABLE. MYRIAD GIVES YOU THREE
19
      CLAIMS AND SAYS ONE IS INVALID, AND TWO ARE VALID.
20
          I URGE THE COURT TO COMPARE THE NATURE OF THE CLAIMS THAT
21
      ARE INVALID TO THOSE THAT ARE VALID.
22
           THANK YOU.
23
           THE COURT: THANK YOU.
           MR. GINDLER: BRIEFLY. THAT'S ALL I NEED.
24
25
           SEOUENOM'S COUNSEL POINTS TO THREE ARTICLES FROM OVER A
```

1 DECADE AFTER THE PATENT APPLICATION THAT USE NEXT GENERATION 2 SEQUENCING TO DETECT FETAL DNA, EITHER IN WHOLE BLOOD OR 3 WITHOUT AMPLIFICATION. 4 WHY DID IT TAKE A DECADE? BECAUSE THE PATENT WAS DONE 5 USING THE CONVENTIONAL TECHNIQUES. HOW DOES THIS TELL YOU 6 WHETHER OR NOT THE CLAIM COVERS TOO MUCH AND IS USING THE 7 ENTIRE NATURAL PHENOMENON? 8 THAT'S HOW YOU TELL. IT'S BEST TO START WITH THE CLAIM 9 LANGUAGE. AND LET'S LOOK AT CLAIM ONE, WHICH EVERYONE HAS BEEN 10 USING AS THE REPRESENTATIVE CLAIM. AND SEQUENOM HAS NOT 11 POINTED TO ANY LIMITATIONS FROM ANY OTHER CLAIMS AS BEING THE 12 BASIS OF FINDING PATENTABLE SUBJECT MATTER. 13 AND WHAT I WANT TO DO IS LOOK AT THE CLAIM RIGHT BEFORE 14 THE PATENT OFFICE REQUIRED THE ADDITION OF THE AMPLIFICATION 15 STEP. 16 REMEMBER, THE APPLICANTS WERE SET TO GET THEIR PATENT, AND 17 THEN THE EXAMINER CALLED THEM AND SAID: 18 "I THINK YOU NEED TO ADD AMPLIFICATION." 19 SO THAT CLAIM WOULD READ AS FOLLOWS: 20 "A METHOD OF DETECTING A PATERNALLY INHERITED NUCLEIC 21 ACID OF FETAL ORIGIN PERFORMED ON A MATERNAL SERUM OR 22 PLASMA SAMPLE FROM A PREGNANT FEMALE WHICH METHOD 23 COMPRISES DETECTING THE PRESENCE OF A PATERNALLY 24 INHERITED NUCLEIC ACID OF FETAL ORIGIN IN THE SAMPLE." IT IS ENTIRELY CIRCULAR. IT DOESN'T TELL YOU ANYTHING 25

1 ABOUT THE METHOD OF DETECTION. WHY? BECAUSE, AS DR. LO TOLD 2 THE PATENT OFFICE, EVERYONE KNOWS THE WAY TO DETECT NUCLEIC 3 ACIDS, CELL-FREE NUCLEIC ACIDS IN SERUM OR PLASMA. I DIDN'T 4 FIGURE OUT THAT ONE. HE DIDN'T CLAIM A PARTICULAR UNIOUE WAY 5 OF DOING IT. 6 AND THE ONLY THING THAT GOT ADDED HERE WAS THE 7 AMPLIFICATION STEP, WHICH EVERYONE AGREES WAS INVENTED A REALLY 8 LONG TIME AGO. AND THE AMPLIFICATION STEP WAS ADDED ONLY 9 BECAUSE THE PATENT OFFICE MADE THE APPLICANTS ADD IT AT THE LAST STAGE. 10 11 THEY HAVE NEVER POINTED TO THE AMPLIFICATION STEP AS: 12 "THIS IS WHAT MAKES MY PROCESS NOVEL," OR POINTED TO 13 SOMETHING ABOUT THEIR DETECTION METHOD THAT MAKES THE STEP 14 NOVEL. 15 THE CLAIM IS ENTIRELY CIRCULAR. IT'S JUST GO AND DETECT 16 PATERNALLY INHERITED FETAL NUCLEIC ACID, BECAUSE WE FOUND IT. 17 THAT PATENT IS NOT VALID. IT DOES NOT CLAIM SUBJECT MATTER. 18 YOU HEARD SEQUENOM'S COUNSEL EXPRESSLY STATE THAT THEY 19 USED HIS WORDS "CONVENTIONAL TECHNIQUES." HIS WORDS. "KNOWN 20 METHODS" TO FIND THIS. 21 SERUM OR PLASMA, THIS IS PART OF BLOOD. IT'S SOMETHING 22 WHICH IS FOUND IN NATURE. PEOPLE AREN'T BUILDING SERUM OR 23 PLASMA. THIS IS PART OF WHO WE ARE. THEY WEREN'T LOOKING IN 24 SOMETHING WHICH THEY CREATED A NEW CONSTRUCT. THIS IS, AGAIN,

25

A NATURAL PHENOMENON.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

AND THEY LOOKED AT A PLACE WHERE PEOPLE HAD LOOKED BEFORE. THE FACT THAT THIS IS DISCUSSED IN PEER-REVIEWED LITERATURE THAT IS SIMPLY AN INDICATION, ARGUMENT BY SEQUENOM'S COUNSEL THAT THIS REALLY WAS NEW. NO ONE REALLY HAD DISCOVERED THIS BEFORE. IF YOU ASSUME THAT'S TRUE, JUST FOR THE SAKE OF THIS ARGUMENT, IT DOESN'T SOLVE THE PROBLEM. BECAUSE, REMEMBER, YOU HAVE TO HAVE AN INVENTIVE CONCEPT WHICH IS SEPARATE AND APART FROM THE NATURAL PHENOMENON. THE INVENTIVE CONCEPT LANGUAGE SEQUENOM'S COUNSEL SAID COMES FROM JUDGE LOURIE. NO, IT DOESN'T. IT ACTUALLY IS THE LANGUAGE WHICH ORIGINATED IN PARKER VERSUS FLOOK. THAT'S THE LANGUAGE I READ TO YOU AND REPEATED AGAIN IN MAYO. YOU HAVE TO ASSESS THAT INVENTIVE CONCEPT WITHOUT REFERENCE TO THE NEW DISCOVERY, OTHERWISE EVERY USE OF A NEW DISCOVERY BECOMES PATENTABLE. BECAUSE YOU COULD ALWAYS SAY -- YOU COULD ALWAYS SAY THAT IT'S A NEW USE. COUNSEL ALSO READ TO YOU THAT SECOND PARAGRAPH ABOUT NEW APPLICATIONS OF KNOWLEDGE. WHERE'S THE NEW APPLICATION OF KNOWLEDGE HERE? I JUST READ YOU A CIRCULAR PATENT CLAIM THAT TALKS ABOUT THE METHOD OF DETECTING PATERNALLY INHERITED FETAL NUCLEIC ACID WHICH COMPRISES THE STEPS OF DETECTING PATERNALLY INHERITED FETAL NUCLEIC ACID OF FETAL ORIGIN, WITH AN

APPLICATION STEP THROWN IN FOR GOOD MEASURE.

1 ONE FINAL POINT. SEQUENOM HAS REFERRED TO CLAIM 21 OF THE 2 '441 PATENT. THE THIRD CLAIM, HE SAYS, THAT THE COURT SAID WAS 3 OKAY. 4 I WOULD INVITE THE COURT TO READ THE DISTRICT COURT 5 DECISION IN MYRIAD, THE FEDERAL CIRCUIT DECISION IN MYRIAD AND 6 THE U.S. SUPREME COURT DECISION IN MYRIAD AND IDENTIFY THE 7 DISCUSSION OF CLAIM 21. 8 THERE IS NONE. IT'S NOT EVEN QUOTED IN ANY OF THE 9 OPINIONS. IT WASN'T CHALLENGED. CLAIM 21 IS A CLAIM TO THE METHOD OF DETECTING AN 10 11 ALTERATION IN THE BRCA1 GENE. WITHOUT ANY SUPPORT OF ANY KIND 12 ANYWHERE, SEQUENOM SAYS THAT CLAIM INVOKES A CONVENTIONAL 13 METHOD. THEY JUST MADE THAT UP. THERE IS NO DISCUSSION OF THAT IN 14 15 THE OPINION. IT TALKS -- THAT CLAIM TALKS ABOUT USING A BRCA1 16 GENE PROBE. IS THAT NEW AND NOVEL IN THE USE OF THAT IN A 17 PROCESS UNCONVENTIONAL? 18 I'M GUESSING THAT SINCE NO ONE CHALLENGED THAT CLAIM IT 19 WAS NOT EVEN AT ISSUE IN THE CASE. 20 I'M GOING TO GUESS THERE'S SOMETHING DIFFERENT ABOUT THAT. 21 BUT TO SAY THAT THE FEDERAL CIRCUIT APPROVINGLY DECIDED THAT 22 CLAIM WAS VALID? IT WAS NEVER CHALLENGED, NEVER DISCUSSED, NOT 23 QUOTED. WE DON'T KNOW A THING ABOUT CLAIM 21 EXCEPT THAT IT 24 WASN'T PART OF THE CASE. 25 AND TO SUGGEST THAT THE MYRIAD COURT UPHELD THAT CLAIM?

1	WHAT MYRIAD SAID IS THAT A NATURAL AN ARTIFICIAL CONSTRUCT
2	MADE IN THE LABORATORY CDNA IS PATENTABLE. AND THAT THE
3	ISOLATED GENE IS NOT PATENTABLE.
4	AND THEY TOLD US ONE MORE THING AT THE END: IF THEY HAD
5	USED A PROCESS TO FIND THAT GENE THAT WAS DIFFERENT MAYBE THAT
6	WOULD HAVE BEEN PATENTABLE. BUT THEY USED A CONVENTIONAL
7	TECHNIQUE. USING THE EXACT SAME LANGUAGE THEY USED IN MAYO.
8	WHAT DOES THAT TELL US ABOUT THE SUPREME COURT'S VIEW ON
9	USING A CONVENTIONAL TECHNIQUE TO IDENTIFY THE LOCATION OF A
10	NEW GENE?
11	IT'S NOT PATENTABLE.
12	THANK YOU.
13	THE COURT: OKAY. THANK YOU.
14	THANK YOU VERY MUCH. THE MATTER WILL BE SUBMITTED.
15	(THEREUPON, THIS HEARING WAS CONCLUDED.)
16	STENOGRAPHY CERTIFICATION
17	"I CERTIFY THAT THE FOREGOING IS A CORRECT
18	TRANSCRIPT FROM THE RECORD OF PROCEEDINGS IN THE ABOVE-ENTITLED MATTER."
19	OCTOBER 28, 2013 KATHERINE WYATT
20	)
21	V = 121-11
22	Larry Wyatt
23	
24	